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WATER SUPPLY OUTLOOK and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

for

MONTANA & NORTHERN WYOMING

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE.

and

MONTANA AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, U.S. Geological Survey, National Park Service, State Engineers of Montana and Wyoming and other Federal, State, and private organizations.

MAY 1, 1962

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Cooperative Snow Survey and Water Supply Forecast Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Fortunately, most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from fore-knowledge of the runoff.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, about 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

By relating snow survey measurements taken over a period of years to spring-summer runoff during the same period, relationships have been developed which make it possible to forecast seasonal runoff several months in advance of occurrence. In order to make a forecast, once a forecast relationship has been developed, the maximum snow water content at previously selected key snow courses is usually entered in the forecast relationship. More accurate forecasts are often obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast relationships.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions.

PUBLISHED BY SOIL CONSERVATION SERVICE

	FUBLI	SHED BI SOIL	CONSERVATION SERVICE	
REPORTS	15	SSUED	LOCATION	COOPERATING WITH
RIVER BASINS				
COLORAGO AND STATE OF UTAH	MONTHLY	(JANJUNE)_	SALT LAKE CITY, UTAH	UTAH STATE ENGINEER AND OTHER AGENCIES
COLUMBIA	MONTHLY	(J AN MAY)	BOISE, IOAHO	TOAHO STATE RECLAMATION ENGINEER
UPPER MISSOURI AND STATE	MONTHLY	(FEB JUNE)	BOZEMAN, MONTANA	MONT. AGR. EXP. STATION
WEST-WIOE	ОСТ. 1.	APR. 1, MAY 1_	PORTLANO, OREGON	ALL COOPERATORS
STATES				
ALASKA	MONTHLY	(MARMAY)	PALMER, ALASKA	ALASKA S.C.D.
AR I ZONA		- APR.1)		SALT R. VALLEY WATER USERS ASSOC ARIZ. AGR. EXP. STATION
COLORAGO ANO NEW MEXICO	MONTHLY	(FEBMAY)	FORT COLLINS. COLORAGO	COLO. AGR. EXP. STATION COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IOAHO	MONTHLY	(FEBMAY)	BOISE, IOAHO	. IOAHO STATE RECLAMATION ENGINEER
NEVACA	MONTHLY	(JANMAY)	RENO, NEVAOA	NEVAGA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
ORE GON	MONTHLY	(JANJUNE)		ORE. AGR. EXP. STATION OREGON STATE ENGINEER
WASHINGTON-	MONTHLY	(FEB JUNE) -	SPOKANE, WASHINGTON	WN. STATE DEPT. OF CONSERVATION
WYOMING	MONTHLY	(FEBJUNE)	CASPER, WYOMING	WYOMING STATE ENGINEER
Copies of these w	arious r	eports may be s	ecured from: Head, Water Supply For Soil Conservation Ser P.O. Box 4170, Portle	rvice
		PUBLISHED BY	OTHER AGENCIES	
REPORTS	<u>i</u>	SSUED		AGENCY
BRITISH COLUMBIA	MONTHLY	(FEBJUNE)		RIGHTS BR., DEPT. OF LANOS AND T BLOG., VICTORIA, B.C., CANAOA
CALIFORNIA -	MONTHLY	(FEBMAY)	CALIF. DEPT. OF WA	TER RESOURCES, SACRAMENTO, CALIF.

FEDERAL-STATE-PRIVATE COOPERATIVE

SNOW SURVEYS AND WATER SUPPLY FORECASTS

for

MONTANA AND NORTHERN WYOMING (Upper Missouri and Upper Columbia River Basins)

Report Prepared By

P. E. Farnes Acting Snow Survey Supervisor

Soil Conservation Service Snow Survey Section Box 855, Bozeman, Montana

Issued By

H. D. Hurd
State Conservationist
Soil Conservation Service
Bozeman, Montana

R. E. Huffman
Director
Montana Agricultural
Experiment Station
Bozeman, Montana



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MONTANA WATER SUPPLY OUTLOOK as of May 1, 1962

Snow surveys made near the first of May indicate a decrease in the amount of water stored in the mountain snowpack during the past month.

All watersheds in the state have a below average May 1 snowpack.

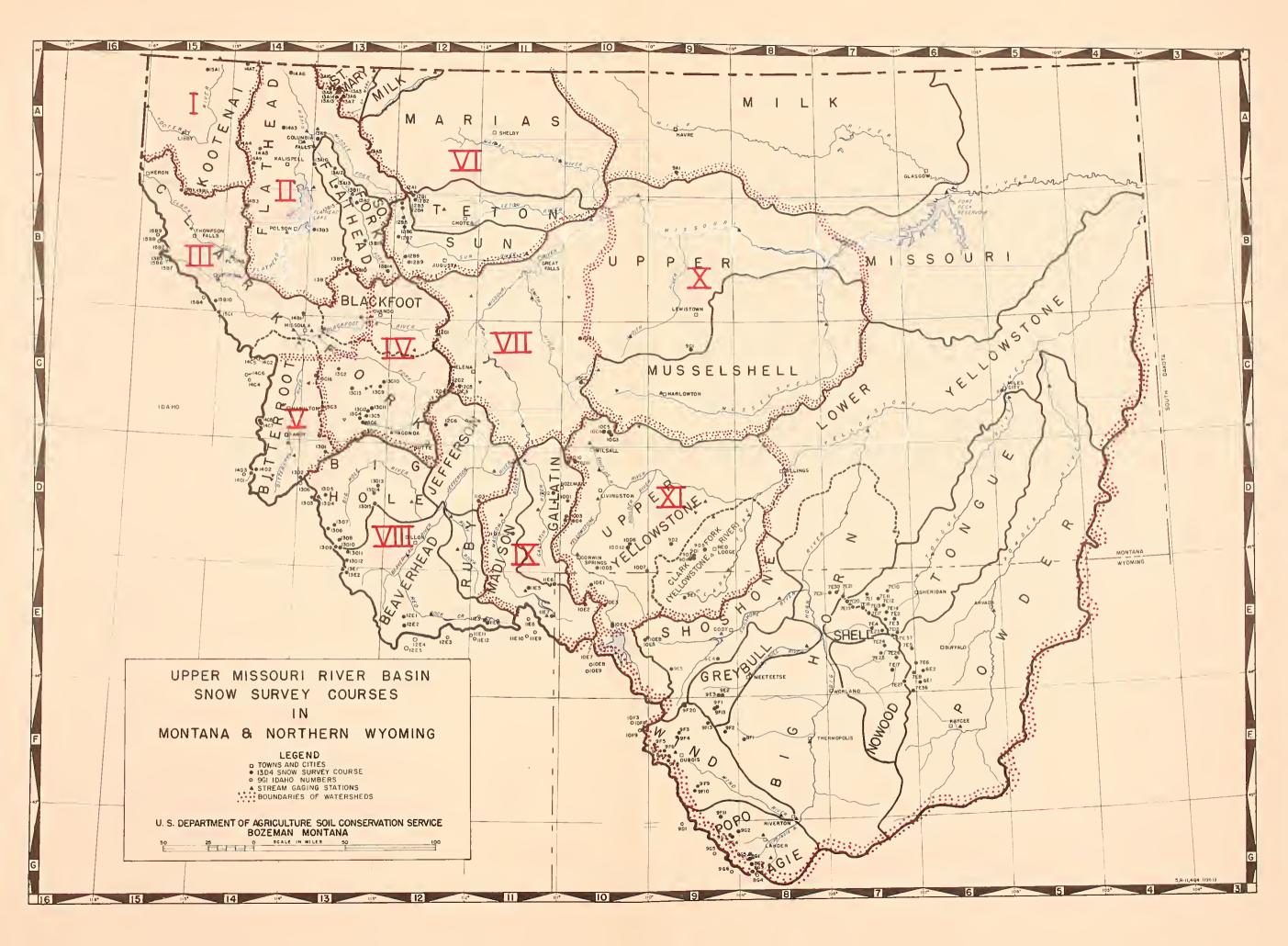
West of the Continental Divide, streamflow during the May through September period is forecast to be near average to 10 percent below average. East of the Divide, streamflow is expected to be about 15 percent below average in the Jefferson, Marias and Sun River drainages. Near average streamflow is expected in the Madison drainage, while the Gallatin and headwaters area of the Yellowstone are forecast at 10 to 15 percent above average.

Storage in irrigation reservoirs is generally near average with the exception of those in the Milk River and Musselshell River drainages.

Mountain soils are generally saturated while valley soils are becoming dry.







INDEX TO MONTANA & NORTHERN WYOMING SNOW COURSES

Drainaga Basin & Course Name	<u>Mumber</u>	<u>Elev</u> .	Location Sec. Lat.	Two.	Range Long,	Record Beggn	Maasuring Dates	Mees. By	Drainago Basin & Course Name	Number	Elev.	Location Sec.	Two.	Range Long.	Racord Began	Measuring	Maes. By	Drainage Besln & Course Name	Number	Elev.	Location Sec. Lat. Lat. ISSOURI RIVER (WYOVING	<u>Twp</u> . BASIN (Co	Range Long, ntinued)		Measuring Dates	Meas. By
			COLUMBIA RI	TER BASIN					DEALERSON DIVER			MISSOURI RIVI	EH BASIN					WIND RIVER		8800	36	42N	109W	1955	23/6	,
KOOTENAI RIVER	15811	5500	6	25 N	30W	1937	4,5,52	2	BEAVERHEAD RIVER Bloody Dick	13010	7600	12	85	16W	1948	3,4	1	8ig Werm Burroughs Creek	9F12 9F4	8800 10000	15	43N 38N	107W 105W	1948 1948	2,3,4,5 2,3,4,5 2,3,4,5	1
Barea Craak Brush Creek Red Mountain	14A4 15A1	5000	13	30N 36N	26W 29W	1937 1937	3,4,5 3,4,5,5‡	i	Gold Stone Lakaviaw Canyon	13D9 11E4	8100 6930	11 26	85 145	16W 2W	1948 1948	3,4 3,4,5 3,4,5	10 10	Dinwoodie Dinwoodie Glaciers	9F10 9F17 9F9	10500		38N 4N	106W 105W	1959 1948	2,3,4,5	1,5 1 1,5
Weasel Divide	14A7	5450	8	37N	24W	1937	3,4,5,52	î	Lakeview Ridge Lemhi Pess	11E3 13E1	7400 7480	27 9	14S 10S	2W 15W	1948 1948 1948	3,4 3,4	1	Dry Creek DuNoir	9F6 9F7	8750 8500	27 12	42N 41N	108W 108W	1940 1948	2,3,4,5	1
FLATHEAD RIVER									Limekiln Selway Junction	12E2 13D11	6950 6800	5 27	15S 8S	9₩ 15₩ 15₩	1948 1948	3,4 3,4	1	Geyser Creek Little Warm	9F8 9F14	9500 7500	24	41N 42N	108W	1948 1955	2,3,4,5	1
Basin Crook Bassoo Poak	13B14A 14B3	5000 5150	11 11	19N 24N	12W 25W	1951 1960	2,3,4,5	1,5	Terrell Creek Treil Creek	13D12 13E2	6650 7090 8850	14 15 18	9S 10S 14S	15W 9W	1948 1948	3,4 3,4	1	Sheridan R.S. #2 T-Cross Ranch Togwotee Pass	9F3 10F9	8000 9600	1 29	43N 44N	110M	1940 1936	2,3,4,5	111
Big Craak Dasart Mountain	1,3B3 13A2M	6750 5600	7 24	22N 31N	18W 19W	1941 1937	3,4,5, 6 1,2,3,4,5	1,5	White Pine Ridga	12E1	8850	18	140	/"				POPO AGIE RIVER								
Griffin Croak Divido Hall Roaring Divida Holbrook	14A9 14A3 13B13A	5150 5770 4530	11 35 18	28N 32N 21N	25W 22W 13W	1960 1942 1951	3,4,5 3,4,5 2,3,4,5	1,5	BIG NOLE RIVER Anderson Meadow	13014	7000	18	38	12W	1948	3,4	1	Blue Ridge	8G2	9500	23	31N	101W	1939	2,3,4,5	1
Kishenehn Logan Creek	14A6 14A5	3886 ·	1.4 34	37N 30N	22W 24W	1954 1937	3,4,5	6 1	Below Sig Nole Pass Big Nole Pass	13D4 13D3	6900 7240	24 28	3S 3S	18A 18A	1948 1948	3,4 3,4	î	Bruce's Camp Hobb's Park	8G5 9G3	6500 10000 9500	24 22 23	32N 2S 2S	101W 3W 3W	1955 1948 1940	2,3,4	1,5
Marias Pass Mineral Creek	13A5H 13A16	5250 4000	34 29	30N 35N	14W 17W	1934 1939	1,2,3,4,5	3	East Boundary Elk Norn Springs	13D5 13D15	6700 8450	22 15	3S 4S 7S	17W 12W 16W	1948 1935 1948	3,4 3,4,5 3,4	3 1	Mosquito Park Saumill Glade	9G4 8G1 8G3	8500 9000	3	31N 30N	101W	1939 1939	2,3,4,5	1,5
North Fork Jocko Quintonkon	13B7 13A13 13B2	6330 3800 7000	3 11	17N 26N 25N	17W 17W 15W	1941 1951	3,4,5, 6	1,5	Jahnke Creek Miner Forks Miner Lake	13D8 13D6 13D7	7340 7300 6720	25 24 10	6S 6S	17W 16W	1948 1945	3,4 3,4	1	South Pess St. Lawrence R.S. Trout Creek	9F11 9G2	9000	26	1N 2S	4W 2W	1940 1948	2,3,4,5 2,3,4,5 2,3,4,5	1,5
Spotted Bear Mt. Strawberry Lake Trinkus Lake	13A10 13B1	6500 6500	23 11 9	28N 25N	19W 17W	1948 1948 1948	1,2,3,4,5 3,4,5 3,4,5	2 2	Wise River	13013	6300	15	25	12W	1948	3,4	1	Twenty Lakes	967	10500	2	18	5W	1959	2,3,4	1,5
Trout Lake Twin Crocks	13A12M 13B11	3600 3580	21 14	28N 26N	17W 16W	1948 1951	1,2,3,4,5	1,2	JEFFERSON RIVER									BIG HORN RIVER								
Upper Holland Laka	1385	7000	28	2011	16W	1948	3,4,5	2	Pienie Grounds	1206 12D1	6500 7200	10 10	5N 1N	6W 7W	1941 1938	2,3,4 1,2,3,4,5	4	Flve-Springs Falls Kirwin	7E31 9F19	7500 11000	19 13	56N 45N	92W 104W	1956 1960	2,3,4,5	1
CLARK FORK RIVER									Pipestone Pass MADISON RIVER	1401	7200	10	TM	,-				Medicine Wheel Owl Creek	7E30 8F1	9000 8700	24 36	56N 43N	92W 101W	1956 1948	2,3,4,5	1
Black Pine Coyote Nill	13013 13810	7100 4200	23 12	8N 18N	15W 16W	1959 1947	3,4 1,2,3,4,5	1 1,2	Nebgen Dam	11E5	6550	22	115	3E	1934	1,2,3,4,5	3	Wood River #2 Timber Creek #2	9F15 9E3	8000 8800 10000	28 25 20	46N 47N 1.611	103W 103W 106W	1956 1955 1961	2,3,4,5	1
El Dorado Mine Frad Burr Paes	1309 13011	7800 8000	23 12	6N	12W 13W	1949 1957	3,4 3,4	1	Jack Creek Norrls Basin	11D5 10E2	7600 7500	13 44°44	6S	1E 110042	1961 1936	1,2,3,4,5	6	Frontier Needle	9F20	10000	20	40	20011	2,02	2,3,4	τ.
Freezeout Pass Gold Creek Lake	15B10 13C10	6800 7200 6200	21 14	15N 8N 1AN	27W 12W	1937 1949	3,4	1,2	North Meadow West Yellowstone	11D3 11E7	7500 6700	23 34	3S 13S	5W	1961 1934	1,2,3,4,5	3	SHOSHONE RIVER	9E4	7800	15	50N	103N	1957	1,2,3,4	1
Noodoo Creek Intorgaard Lubrecht Forest ∯6	1501 1304 1308	6450	6 11	5N 13N	27W 1.3W 1.4W	1937 1936 1951	2,3,4 1,2,3,4,5	1,2 4	GALLATIN RIVER									East Entrance Ishawoos Cone	10E6 9E5	7000	17 12	52N 49N	109W 108W	1948 1960	1,2,3,4,5	6
Red Lion Skalkaho Summit	13012 1303	7000 7259	27 30	6N 6N	13W 17W	1958 1937	3,4	1	Devil's Slide Hood Meadow	10D4 10D3	8100 6600	14 22	5S 4S	6E 6E	1935 1935	2,3,4,5	1	Sylvan Pass Younts Peak	10E5 9F18	7100 8500	12 28	52N 46N	110W	1936 1960	1,2,3,4,5	6 1
Slide Rock Mt. Southern Cross	1302 1305	7100 6500	35 8	10N 5N	16W 13W	19 <i>3</i> 7 19 <i>3</i> 6	3,4 2,3,4	1 4	New World Twenty-One Mile	10D1 11E6	6700 7150	24 1	3s 11s	6E 5E	1939 1934	2,3,4 1,2,3,4,5	3	NOWOOD CREEK								
Storm Lake Stuart Mill	1307 1306	7780 6500	19 19	4N 5N	13W 13W	19 <i>3</i> 9 19 <i>3</i> 6	1,2,3,4,5	4	MISSOURI RIVER MAIN ST	EM								Cold Springs Camp	7E25	8700	1	50N	86W	1956	2,3,4,5	1
F.V. Mountain BITTERROOT RIVER	1481	6800	33	15N	19₩	1956	1,2,3,4,5	1	Chessman Reservoir Crystel Lake	1205 901	6200 6100	2 19	8N 12N	5W 18E	1936 1941	1,2,3,4,5	3	Medicine Lodge Lakes Onion Gulch	7E24 7E27	9500 8100	31	51N 48N 50N	87W 85W	1956 1956 1956	2,3,4,5	1
Ambrose	13016	6475	28	9N	18W	1960	3,4,5	1	Gresshopper Kings Hill	1002 1001	7000 7950	19 35	9N 13N	8E 7E	1938	3,4 3,4,5	1 3	Tensleep Lake Tyrell R.S.	7E26 7E35	9075 8300	33 30	49N	86W 86W	1956	2,3,4,5	ì
East Fork R.S. Gibbons Pass	13D1 13D2	5400 7100	16 4	2N 2S	17W 19W	1937 1934	3,4	1,3	Rocky Boy Stemple Pass	9Al 12Cl	5200 6900	15 16	28N 13N	16E 7W	1941 1934	3,4 3,4,5	7	SHELL CREEK								
Lolo Pass Lost Norsa	1405 1407 14D2	5230 5940	11 5	10N 4N	24W 23W	1937 1960	3,4,5 3,4,5	1,2	Ten Mile Creek L. Ten Mile Creek M.	1202 1303	6250 6800	13 13	8n 8n	6W	1935 1934	1,2,3,4,5	3 3	Bald Mountein Grenite Pass	7E21 7E17	9600 8950	33 19	56N 54N	91W 88W	1956 1956	2,3,4,5 2,3,4,5	1
Nez Perce Camp Nez Perce Pass Twin Lakes	1402 1401 1408	5580 6575 6510	19 25 32	1S 1S 5N	23W 24W 23W	1937 1937 1960	3,4,5 3,4,5	1	Ten Mile Creek, U.	1204	8000	19	8N	5W	1935	1,2,3,4,5	3	Ranger Creek Shell Creek	7E4 7E23	8800 9600	32 12	53N 52N	88W 88W	1935 1956	2,3,4,5	1
2 WAM DELEGG	1400	0,10	<i>J</i> .,) N	λ.)#	1900	3,4,5	1	SUN-TETON-MARIAS RIVER Benchmark	12B8	5500	9	20N	10W	1948	3 /	1	TONGUE RIVER		,						
			saskatchewan i	RIVER 8ASI	И				Cebin Creek Flve-Bull	12B6 12B9	5400 5600	33 36	23N 20N	10W 10W	1949 1948	3,4 3,4 3,4	1	Beaver Tongue Div.	7E20	9200	12	55N	91W	1956	2,3,4,5	1
ST. MARY									Freight Creek Gates Perk	12A1 12B5	6000 5300	13 31	26N 24N	10W	1948 1949	3,4 3,4	1	Big Goose #2 Bone Springs Div.	7E32 7E18	7700 9200	4 32	53N 55N	86W 89W	1955 1956	2,3,4,5	1
Iceberg Lake #3	13A3	5600	34	36N	16W	1922	5	3,9	Goat Mountain Waldron Creek West Fork	12B7 12B2 12B1	7000 5600 6000	20 16 6	22N 25N 25N	10W	1934 1948	3,4 3,4	1	Burgess R.S. #2 Dome Lake #2 Gloom Creek	7E33 7E34	7900 8800	36 11	56N 53N 55N	89W 87W	1955 1950	2,3,4,5	1
Josaphine Lover #9 Mount Allen #7 Piegan Pass #6	13A14 13A7 13A6	4900 5700 5500	10 22 15	35N 35N 35N	16W 16W	1955 1922 1922	5	3,9 3,9 3,9	Wrong Creek Wrong Rldge	12B4 12B3	5700 6800	32 17	25N 25N	10M 10M	1948 1949 1949	3,4 3,4	1	Sibley Lake Sucker Creek	7E14 7E11 7E12	9300 8000 9000	32 10 19	55N 55N	87W 88W 87W	1956 1956 1956	2,3,4,5	1
Ptermigan #8	1348	5800	32	36N	16W	1937	5	3,9	MILK RIVER (Cenada)				~///	704	1747	3,4	1	Stamboat Point Wood Rock G.S.	7E10 7E13	7500 8500	32	56N 54N	87W 88W	1956 1956	2,3,4,5 2,3,4,5 2,3,4,5	1
									Cress Day Cypress Park	10AA2 9AA1	3450 4000	49°-191		00-141-151		4	9	Geneva Pass	7E37	10600	30	5211	86W	1961	2,3,4,5	î
									Elkweter Val Marie	10AA1 7AA1	4100 2700	49°-40° 40°-19°	110	9°-31 -00' 0°-15 -16' 7°-43'-44'	1953	4	9	POWDER RIVER								
									UPPER YELLOWSTONE RIVE					, -45 -44	1777	4	9	Sear Trap	7F1	8000	10	45N	85W	1960	2,3,4,5	1
									Sald Ridge Camp Senia	1005 9D1	7500 7890	11 2	411 85	10E 18E	1961 1937	3,4,5	i.	Canyon Creek Clouds Peak	7F2 7E36	7400 10000	16 15	43N 51N	86W 85W	1960 1960	2,3,4,5 2,3,4	1
									Cenyon Cooke City	10E3 10D7	7750 7400	44°-44° 25	9s	10°-301 14E	1938 1937	3,4,5 1,2,3,4,5 1,2,3,4,5	6	Muddy Creek G.S. Munkres Pess Soldier Park	6E2 7E8	7800 9700	11	48N 48N	84W 85W	1956 1950	2,3,4,5	1
									Crevice Mt. Gertrude Lake	10D5 9D3	9250 9250	22 10	9\$ 8\$	9E 18E	1935 1961	3,4	2	Sour Dough Tensleep R.S.	7E5 7E6 7E7	8700 8500	36 17	51N 49N	85W 84W	1950 1936	2,3,4,5	1
									Grizzly Peak Independence Lake Camp	9D5 10D6 10E4	8400 8000 7850	26 22 44 ⁰ -34	7\$ 7\$	19E 12E	1961 1940	3,4,5	1		LEI	8300	30	149N	6.6W	1956	2,3,4,5	1
									Lodgepole Lupine	9E1 10E1	8200 7300	32 44°-54	56N	100-24	1936 1940	1,2,3,4,5	6 1,2	a. Numerals 1,2,3,4	and 5 refe	r to Tana	mit 1 Pakan	- 1 11				
									Monument Peak Porcupine R.S.	10D12 10C3	9000	22 10	7S 4N	10°-37° 12E 10E	1938 1961	1,2,3,4,5	6	b. Numerals refer to	Agency th	at sacurac	the corne	y I, March	1, April 1	and May 1.		
									Timberline Creek Sacejewaa	9D4 10D10	8850 6550	10 36	8S 2N	18E 6E	1938 1961	3,4,5 3,4,5	1	2. U. S. Forest	Service	ce	one suow sm	1	7. Montana E			
UPDA SCS LINCOLN, NEPP 1991									West Rosebud	902	7500	10	75	16E	1960 1960	1,2,3,4,5	1 4	3. U. S. Geologi 4. Montana Power	cal Simiari				B. Montana S Dominion			

b. Numerals refer to Agency that secures the snew survey as follows:

1. Soil Conservation Service
2. U. S. Forest Service
3. U. S. Geological Survey
4. Montana Power Company
5. U. S. Indian Service
6. National Park Service

^{7.} Montana Experiment Statlon
8. Montana State Forestry School
9. Dominion Water & Power Bureau
10. U. S. Fish and Wildlife Sorvice
11. U. S. Bureau of Reclamation

M - Soil Molsture A - Aerlal Marker



SOIL MOISTURE as of May 1, 1962

Drainage Basin and Station	Station No.	Elev.	Soil Pr in In Depth	rofile nches Cap.	Date			re Con bout 5 1960	
GALLATIN College Site	11D2M	4856	54	14.5	4/27	11.9	11.3	13.1	11.8
MADISON Red Bluff	11D4M	4900	40	4.7	4/28	2.0	2.4	wes	-
SHIELDS Battle Ridge Shields River	10D11M 10C4M	6020 5850	48 48	15.4 20.8	4/29 4/29	14.6	14.4 16.4		<u>-</u>
FLATHEAD Desert Mountain Marias Pass Spotted Bear R.S. Trout Lake	13A2M 13A5M 13B15M 13A12M	5600 5250 3700 3600	54 54 28 54	8.4 6.5 6.2 12.7	4/27 4/25 4/30 4/30	8.9 6.1 6.0 12.6	8.2 6.0 6.2 12.5	8.8 5.9 6.0 12.4	8.2 6.0 6.1 12.5

SOIL MOISTURE as of October 1, 1961

						<u>1961</u>	<u>1960</u>	1959	Avg.
GALLATIN College Site	11D2M	4856	54	14.5	9/29	9.1	5.8	8.6	5.8
MADISON Red Bluff	llD4M	4900	40	4.7	9/22	3.2	-	-	east
SHIELDS Battle Ridge Shields River	10D11M 10C4M	6020 5850	48 48	15.4 20.8	9/30 9/30	9.3 8.7	10.6	-	
FLATHEAD Desert Mountain Marias Pass Spotted Bear R.S. Trout Lake	13A2M 13A5M 13B15M 13A12M	5600 5250 3700 3600	54 54 28 54	8.4 6.5 6.2 12.7	10/5 9/26 10/5 10/5	4.9 3.6 4.4 7.8	4.5 2.8 0.9 6.9	7.2 4.9 5.2 9.8	5.8 3.8 3.1 7.7

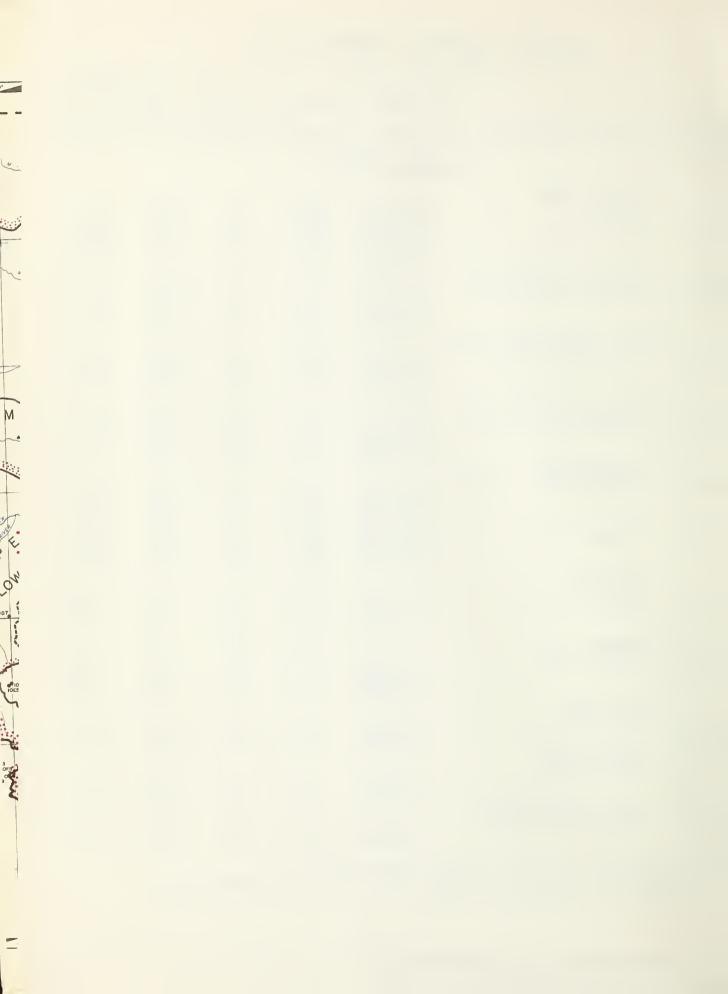
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	AS OF I	MAY 1, 1962			(1000	Acre Feet)
		FORECAST	FORECAST	PERCENT	MEASURE	
NO.	RIVER AND FORECAST POINT	PERIOD	THIS YEAR	AVERAGE	LAST YEAR*	AVERAGE
	COLI	UMBIA RIVER I	BASIN			
	KOOTENAI RIVER					
3030	Libby (at)	May-Sept	6219	88	8267 7262	7053
3050	Leonia (at)	May-July May-Sept	5303 6994	88 88	9362	6024 7994
		May-July	6024	87	8351	6903
	NORTH FORK FLATHEAD RIVER	•	- '			, ,
3555	Columbia Falls (near)	May-Sept	1590	91	1894	1749
		May-July	1435	91	1754	1576
	WIRDIE SON STANSSON	May-June	1182	91	1569	1298
2505	MIDDLE FORK FLATHEAD RIVER				- 4 -	
3585	West Glacier (near)	May-Sept	1680	99	1689	1687
		May-July	1542	99	1585	1553
	COLUMN THE WAY TO DESCRIPT	May-June	1271	98	1415	1286
3625	SOUTH FORK FLATHEAD RIVER	Warn Court	2010	7.07	2027	201.5
2027	Columbia Falls (at)(17)	May-Sept	2040	101	2024	2015
		May-July	1925	101	1934	1897
	FLATHEAD RIVER	May-June	1614	100	1795	1617
3630	Columbia Falls (at)(17)	May-Sept	5433	97	5668	5608
,,,,,	00144014 14115 (40)(17)	May-July	4995	97	5329	5155
		May-June	4147	96	4819	4302
3720	Polson (near)(18)	May-Sept	6452	98	6738	6605
	1011011 (11011) (120)	May-July	5933	98	6326	6081
		May-June	4921	98	5713	5039
	SWAN RIVER	1147 0 4410	4/~=	,0	7143	JUJ/
3700	Big Fork (near)	May-Sept	596	108	627	554
		May-July	517	108	553	479
		May-June	404	108	472	374
	BLACKFOOT RIVER				·	
3400	Bonner (near)	May-Sept	879	100	707	879
		May-July	786	100	638	783
		May-June	647	99	568	655
200 =	FLINT CREEK					
3295	Maxville (at)	May-Sept	36.7	95	27.3	38.7
	DOM DED ANNEX	May-July	26.1	95	18.5	27.6
3300	BOULDER CREEK		00 (do		
3300	Maxville (at)	May-Sept	23.6	89	14.3	26.4
	MIDDLE FOR DOOR OPERS	May-July	21.1	88	13.1	24.0
3320	MIDDLE FORK ROCK CREEK	Marr Cant	60.2	02	r.r. o	mr /
2220	Philipsburg (near)	May-Sept	69.3	92	55.3	75.6
		May-July	62.1	92	50.4	67.6

⁽¹⁷⁾ Corrected for storage in Hungry Horse Reservoir.(18) Corrected for storage in Hungry Horse Reservoir and Flathead Lake.

^{- 4 -}

^{*} PROVISIONAL DATA FURNISHED BY U.S. GEOLOGICAL SURVEY



					(1000 Acre Feet)		
		FORECAST	FORECAST	PERCENT			
NO.	RIVER AND FORECAST POINT	PERIOD	THIS YEAR	AVERAGE	LAST YEAR*	AVERAGE	
	CLARK FORK RIVER						
3404	Milltown (above)(14)	May-Sept	644	92	418	698	
		May-July	552	92	347	600	
		May-June	452	92	2 98	492	
3405	Missoula (above)	May-Sept	1523	97	1125	1577	
		May-July	1338	97	984	1383	
		May-June	1099	96	866	1147	
3530	Missoula (below)	May-Sept	2853	97	2125	2950	
		May-July	2561	97	1907	2648	
		May-June	2123	97	1735	2200	
3545	St. Regis (at)	May-Sept	3853	97	3070	3948	
		May-July	3427	97	2764	3540	
		May-June	2869	97	2489	2950	
3890	Plains (near)(18)	May-Sept	10683	98	10276	10837	
		May-July	9580	98	9514	9816	
		May-June	7927	98	8591	8125	
3920	Whitehorse Rapids (at)(18)	May-Sept	11940	98	_	12144	
		May-July	10510	98	_	10241	
		May-June	8825	98		9027	
	WEST FORK BITTERROOT RIVER	,•					
3425	Conner (near)(15)	May-Sept	145	95	_	153	
	, , , , , ,	May-July	133	94	_	141	
	BITTERROOT RIVER						
3440	Darby (near)	May-Sept	487	94	369	519	
		May-July	447	93	333	479	
		May-June	382	93	306	409	
3528	Missoula (near)(16)	May-Sept	1330	96	1000	1379	
		May-July	1223	96	923	1272	
		May-June	1024	96	869	1066	
	BLODGETT CREEK						
3475	Corvallis (near)	May-Sept	39.8	95	35.1	41.9	
	(,	May-July	37.7	95	33.7	39.6	
	BURNT FORK CREEK		2				
3510	Stevensville (near)	May-Sept	26.4	92	19.4	28.6	
	(====	May-July	23.2	92	17.2	25.3	
				•			

⁽¹⁴⁾ Difference in observed flow, Clark Fork above Missoula & Blackfoot at Bonner.

⁽¹⁵⁾ Corrected for storage in West Fork Bitterroot River Reservoir. (16) Difference in observed flow, Clark Fork above and below Missoula.

⁽¹⁸⁾ Corrected for storage in Hungry Horse Reservoir and Flathead Lake.

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(1000 Acre Feet)

AS OF MAY 1, 1962

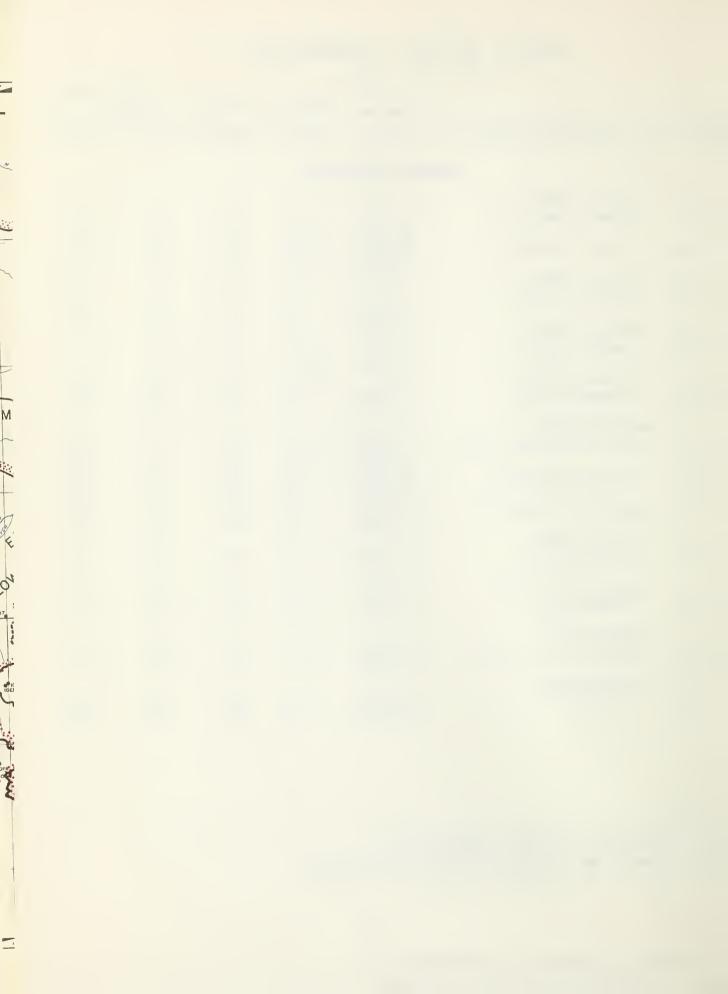
		FORECAST	FORECAST	PERCENT	MEASURE	D FLOW
NO.	RIVER AND FORECAST POINT	PERIOD	THIS YEAR	AVERAGE	LAST YEAR*	AVERAGE
	WTO	TOURT RIVER	DAGIN			
	MIS	SOURI RIVER	BASIN			
	RED ROCK RIVER					
0110	Kennedy Ranch (at)	May-Sept	50.6	92	20.4	54.9
		May-July	45.0	92	17.0	49.1
0125	Monida (near)(1)	May-Sept	56.3	91	21.2	62.3
	, , , ,	May-July	52.6	91	14.1	58.1
	BIG HOLE RIVER			•-	• • •	,
0255	Melrose (near)	May-Sept	557	83	356	668
		May-July	506	83	327	611
	BOULDER RIVER					
0330	Boulder (near)	May-Sept	64.1	92	42.6	69.4
		May-July	60.6	92	40.5	66.0
	JEFFERSON RIVER					
0345	Sappington (at)	May-Sept	764	84	407	913
		May-July	665	83	356	798
000=	MADISON RIVER					
0375	West Yellowstone (near)	May-Sept	197	105	144	187
0200	0 24 ()(0)	May-July	142	105	99	136
0385	Grayling (near)(2)	May-Sept	407	104	285	389
0/10	M-4772 / \/O\	May-July	317	106	198	298
0410	McAllister (near)(3)	May-Sept	668	101	440	659
	GALLATIN RIVER	May-July	526	102	311	516
0435	Gateway (near)	W O- I	500	77/	07.0	
0455	Gateway (near)	May-Sept	503	116	310	431
	EAST GALLATIN RIVER	May-July	426	116	246	367
0480	Bozeman (at)	May-Sept	41.1	110	16.8	207 2
0400	Dozeman (ac)	May-July	34.6	110 110	10.8	37.2
	HYALITE CREEK	may-sury	24.0	110	12.7	31.5
0500	Haylite R. S. (at)(4)	May-Sept	36.2	109	22.6	33.2
	110 110 110 Do (20)(4)	May-July	30.4	108	18.9	28.2
	GALLATIN RIVER	ray oury	20.4	100	10.7	20.2
0525	Logan (at)	May-Sept	528	124	196	426
	<u> </u>	May-July	442	124	130	356

(2) Corrected for storage in Hebgen Lake.

⁽¹⁾ Corrected for storage in Lima Reservoir.

⁽³⁾ Corrected for storage in Hebgen and Ennis Lakes.

⁽⁴⁾ Corrected for storage in Middle Creek Reservoir.



	AS 01 12	11 1, 1,0~			(1000	cre Feet)
	•	FORECAST	FORECAST	PERCENT	MEASURED	
NO.	RIVER AND FORECAST POINT	PERIOD	THIS YEAR	AVERAGE	LAST YEAR*	AVERAGE
	MISSOURI RIVER					
0545	Toston (at)(3)	May-Sept	1966	98	932	2006
		May-July	1654	98	716	1693
0908	Fort Benton (at)(5)	May-Sept	2867	93	_	3098
		May-July	2385	93	-	2575
1095	Virgelle (at)(6)	May-Sept	3412	90	-	3799
		May-July	2859	89	-	3209
1150	Zortman (near)(6)	May-Sept	3675	89	_	4140
		May-July	3095	89	_	3477
1320	Fort Peck Dam (below)(7)	May-Sept	3458	86	_	4027
		May-July	2972	86	_	3446
1770	Wolf Point (near)(7)	May-Sept	3516	83	-	4256
		May-July	3040	83	-	3647
3300	Williston, N. D. (nr)(8)	May-Sept	9620	91	4107	10565
		May-July	8340	91	3346	9144
,	PRICKLY PEAR CREEK					
0615	Clancy (near)	May-Sept	16.2	78	8.2	20.7
		May-July	13.8	78	6.8	17.6
	NORTH FORK SUN RIVER					
0785	Augusta (near)	May-Sept	200	89	-	225
		May-July	180	87	-	207
	SUN RIVER					
0786	Gibson Dam (at)(10)	May-Sept	492	89	458	551
		May-July	445	89	424	501
000#	MARIAS RIVER					
0995	Shelby (at)	May-Sept	495	85	358	581
		May-July	446	85	337	527
770-	SOUTH FORK MUSSELSHELL R.					
1185	Martinsdale (above)	May-Sept	42.0	91	9.5	46.3
	VIII OTH OVER A DESCRIPTION OF THE OWNER	May-July	40.2	91	9.1	44.2
7.005	MUSSELSHELL RIVER		(0.00			
1205	Harlowton (at)(9)	May-Sept	60.8	89	-	68.2
		May-July	59.8	89	-	67.2

⁽³⁾ Corrected for storage in Hebgen and Ennis Lakes.

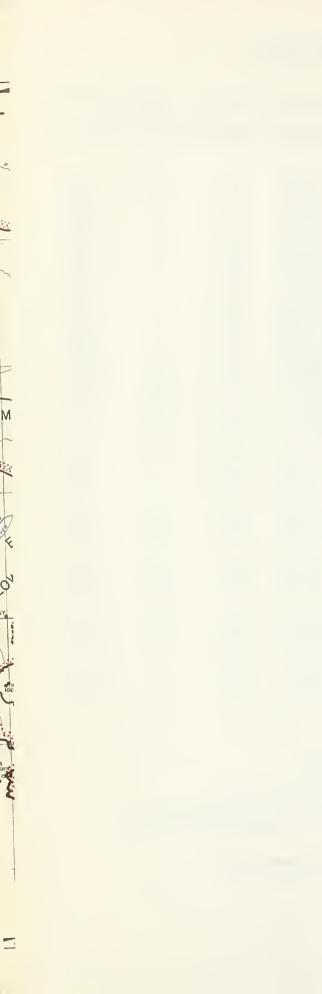
⁽⁵⁾ Corrected for storage in Canyon Ferry Reservoir.

⁽⁶⁾ Corrected for storage in Canyon Ferry and Tiber Reservoirs.

⁽⁷⁾ Corrected for storage in Canyon Ferry, Tiber and Fort Peck Reservoirs.(8) Corrected for storage in Canyon Ferry, Tiber, Fort Peck, Buffalo Bill and Boysen Reservoirs.

⁽⁹⁾ Corrected for storage in Durand and Martinsdale Reservoirs.

⁽¹⁰⁾ Corrected for storage in Gibson Reservoir and diversions.



AS OF MAY 1, 1962

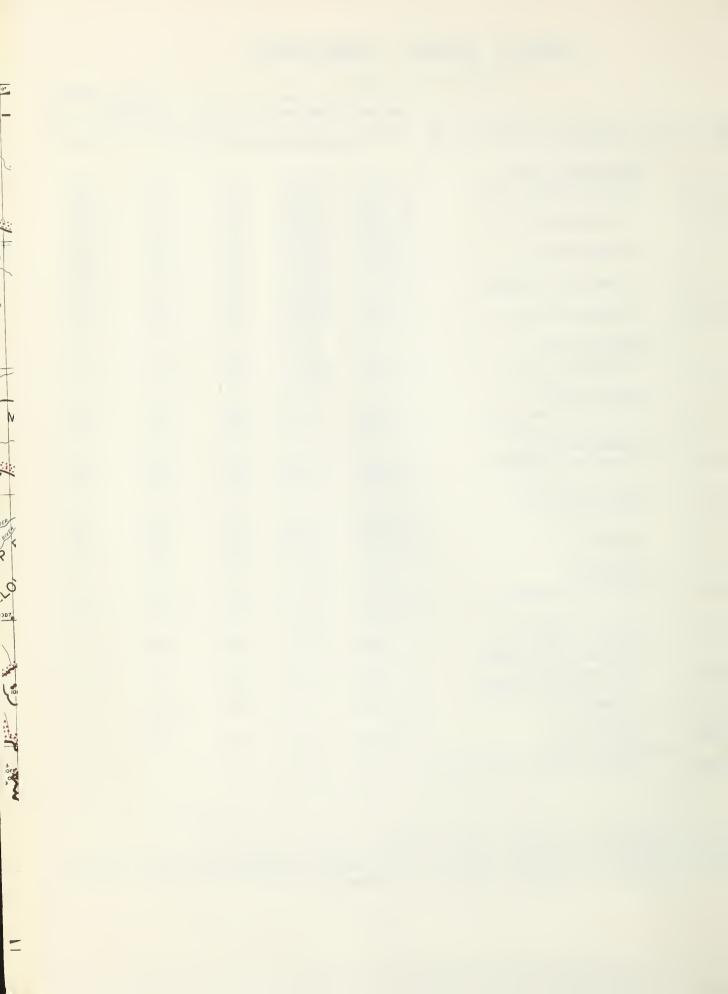
					(1000	Acre Feet)
		FORECAST	FORECAST	PERCENT	MEASURE	FLOW
NO.	RIVER AND FORECAST POINT	PERIOD	THIS YEAR	AVERAGE	LAST YEAR*	AVERAGE
	YELLOWSTONE RIVER					
1915	Corwin Springs (at)	May-Sept	2078	110	1307	1888
	, ,	May-July	1705	109	1079	1557
1925	Livingston (at)	May-Sept	2336	109	1370	2136
07.45	D4224 (.)	May-July	1918	109	1116	1747
2145	Billings (at)	May-Sept	4234	106	2294	3998
2000	200	May-July	3555	105	1872	3393
3090	Miles City (at)(12)	May-Sept	6195	100	2966	6182
2205	G: 1 (+) (20)	May-July	5357	100	2440	5343
3295	Sidney (at)(12)	May-Sept	6210	98	2737	6362
	CUITEIDO DIVERD	May-July	5300	98	2311	5430
1935	SHIELDS RIVER	V C+	05 (7.00	20. /	00 5
エフノノ	Clyde Park (at)	May-Sept	95.6	103	32.4	92.5
	ROSEBUD CREEK	May-July	87.8	103	30.6	84.8
2045	Absarokee (near)(11)	Marr Cont	270	106	7.40	255
~04)	Absaronee (Hear)(II)	May-Sept	215	106	142	255
	STILLWATER RIVER	May-July	215	100	103	204
2050	Absarokee (near)(11)	May-Sept	624	105	347	501
~0)0	nodaronce (near)(11)	May-July	518	104	272	594
	CLARKS FORK RIVER	ray-oury	710	104	212	497
2075	Chance (at)	May-Sept	545	93	435	590
	(40)	May-July	488	93	390	525
2085	Edgar (at)	May-Sept	568	94	441	616
		May-July	497	92	371	540
	ROCK CREEK	ind our	471	/~	211	740
2095	Red Lodge (near)	May-Sept	128	117	76.2	109
	g (,	May-July	98	117	56.6	83.6
	BULL LAKE CREEK		, -	,	7010	0,00
2250	Lenore (near)(14)	Apr-Sept	184	108	134	170
	NORTH POPO AGIE RIVER	• •	,		-2.4	-,-
2320	Milford (near)	Apr-Sept	92	124	57	74
	LITTLE POPO AGIE RIVER			•		1.74
2330	Lander (near)	Apr-Sept	57	137	25.3	43
	WIND RIVER	•				,,,
2185	Dubois (at)	Apr-Sept	106	106	60	100
	SHOSHONE RIVER					
2820	Buffalo Bill Dam (bl)(13)	Apr-Sept	850	100	-	851

⁽¹¹⁾ Corrected for storage in Mystic Lake.

(12) Corrected for storage in Buffalo Bill and Boysen Reservoirs.

(14) Corrected for storage in Bull Lake Reservoir.

⁽¹³⁾ Corrected for storage in Buffalo Bill Reservoir and Heart Mountain diversion.



AS OF MAY 1, 1962 (Inches)										
CURRENT DATA PAST RECORD										
	SNOW COURSE		DATE	SNOW DEPTH	WATER	WATER C	ONTENT			
NO.	NAME	ELEVATION	SURVEY	DEFIN	CONTENT	LAST YEAR	AVERAGE			
		COLUMBIA	ם משעדם	ACTN						
		COLUMBIA	RIVER D	ASIN						
Kootenai	River									
15B11	Baree Creek	5500	5/2	83	41.8	53.0	48.2*			
14A4	Brush Creek	5000	4/23	22	8.4	12.6	10.5*			
Can 10	Fernie	3500	4/30	0	0	2.3	2.7*			
Can 12A	Field	4200	5/3	0	0	0.5	0.8*			
Can 43	Gray Creek	5100	4/29	49	17.5	23.7	20.4*			
Can 33	Kicking Horse	5400	5/1	31	11.1	12.8	11.8*			
Can 20B	Kimberley	3800	4/26	0	0	0.5	1.5*			
Can 32	Marble Canyon	5000	5/2	36	9.0	13.0	13.5*			
Can 10A	New Fernie	4100	4/30	10	3.9	10.2	6.7*			
15A1	Red Mountain	6000	4/25	37	14.4	23.4	19.7			
Can 8A	Sinclair Pass	4500	5/3	0	0	2.6	2.1*			
Can 20A	Sullivan Mine	5100	4/30	24	9.2	16.5	11.9*			
Can 41	Upper Elk River	4400	4/29	0	0	4.1	2.2*			
14A7	Weasel Divide	5450	4/24	72	30.5	41.0	34.7*			
Flathead	River									
13B14A	Basin Creek	5000	5/4	0	0	0	1.8*			
14B3	Bassoo Peak	5150	4/26	13	5.3	9.4	_			
13B3	Big Creek	6750	5/1	99	49.0	56.4	48.4*			
13A17	Camp Misery	6400	4/26	103	43.9	-	_			
13A2M	Desert Mountain	5600	4/27	30	12.2	14.6	13.0			
13B4	Fatty Creek	5500	5/1	46	18.6	_	_			
14A9	Griffin Creek Divide	5150	4/27	13	5.1	8.5	-			
14A3	Hell Roaring Divide	5770	5/3	62	28.1	35.1	28.7			
13B13A	Holbrook	4530	5/4	0	0	1.6	1.2*			
14A5	Logan Creek	4300	4/23	5	2.0	3.2	2.7*			
13A5M	Marias Pass	5250	4/30	36	14.7	16.4	15.7			
13B7	North Fork Jocko	6330	5/2	103	48.8	55.6	44.7*			
13B2	Spotted Bear Mountain	7000	5/1	20	7.5	12.2	12.6*			
13A10	Strawberry Lake	6500	5/4	69	34.0	48.0	40.0*			
13B1	Trinkus Lake	6500	5/4	89	43.6	44.6	41.4*			
13A12M	Trout Lake	3600	4/30	16	3.5	1.4	8.2*			
13B11	Twin Creeks	3580	4/30	0	0	0	0.8*			
13B5	Upper Holland Lake	7000	5/4	78	37.8	37.1	36.8*			



							(Inches)
		(CURRENT DATA		Y PAST R	ECORD
	SNOW COURSE	1	DATE	SNOW DEPTH	WATER	WATER C	ONTENT
110.	NAME	ELEVATION	SURVEY	UCFIN	CONTENT	LAST YEAR	AVERAGE
Clark F	ork River					-	
13013	Black Pine	7100	4/24	24	9.0		-
13B10	Coyote Hill	4200	4/30	7	3.2	2.7	2.1*
15C2	Fish Lake Airstrip	5000	4/30	78	35.0	42.7	46.1*
13011	Fred Burr Pass	8000	4/23	52	22.6	-	-
15B10	Freezeout Summit	6800		tinued		38.6	35.7*
15C1	Hoodoo Creek	6200	4/26	99	44.5	56.2	46.9*
15B2	Lookout	5250	4/26	68	30.8	37.8	34.0*
1308	Lubrecht Forest #6	4040	4/27	0	0	0	0.1*
13012	Red Lion	7000	4/23	38	13.8	-	-
1303	Skalkaho Summit	7259	4/24	55	24.7	-	25.8*
1302	Slide Rock Mountain	7100	4/25	34	13.1	-	14.0*
1307	Storm Lake	7780	4/26	33	11.2	15.3	16.3*
1301	Stuart Mountain	7400	4/28	71	30.0	33.3	30.1
14B1	T. V. Mountain	6800	4/27	39	17.8	20.4	21.0*
Bitterr	oot River						
13016	Ambrose	6475	4/24	23	9.0	13.9	_
13D2	Gibbons Pass	7100	4/27	36	16.2	20.4	23.0
1405	Lolo Pass	5230	4/24	71	33.7	28.0	29.7
1407	Lost Horse	5940	4/25	64	29.8	36.2	_
14D2	Nez Perce Camp	5580	4/26	13	5.6	10.1	8.3*
14D1	Nez Perce Pass	6575	4/26	15	6.8	11.8	12.6
1408	Twin Lakes	6510	4/25	88	43.7	47.2	-



AS OF MAY 1, 1962 (Inches)									
		CURRENT DATA			PAST RECORD				
SNOW COURSE			DATE	SM OW DEPTH	WATER	WATER CONTENT			
но.	NAME	ELEVATION	SURVEY			LAST YEAR	AVERAGE		
	MISSOURI RIVER BASIN								
Beaverh	ead River								
11E4 11E3	Lakeview Canyon Lakeview Ridge	6930 7400	4/27 4/27	33 20	9.6 6.4	7.8 6.0	9.6* 7.6*		
Big Hol	e River								
13D15	Elk Horn	8450	4/28	19	5.5	6.9	8.7*		
<u>Jeffers</u>	on River								
12D1	Pipestone Pass	7200	5/1	4	1.1	5.0	3.9*		
Madison	Madison River								
11E5 10E2 11E7	Hebgen Dam Norris Basin West Yellowstone	6550 7500 6700	4/26 5/1 4/26	8 14 13	2.4 5.2 5.0	4.9 5.7 5.4	3.9 6.3* 5.6		
Gallati	n River								
10D4 10D3 11E6	Devil's Slide Hood Meadow Twenty-One Mile	8100 6600 7150	4/28 4/28 4/26	67 18 29	25.0 4.8 11.4	23.6 7.6 16.4	23.4 5.5 14.5		
Missour	i River (Main Stem)								
1205 1001 1201 1202 1203 1204	Chessman Reservoir Kings Hill Stemple Pass Tenmile, Lower Tenmile, Middle Tenmile, Upper	6200 7950 6900 6250 6800 8000	4/30 4/27 4/30 4/29 4/28 4/28	0 32 23 3 20 32	0 10.9 7.3 0.8 6.6 10.7	1.5 12.4 8.3 3.6 10.4 14.0	2.6 14.1* 8.7 3.6 9.0 12.7		
Sun-Teton-Marias Rivers									
12B7	Goat Mountain	7000	4/30	26	9.3	11.0	9.2*		



AS OF MAY 1, 1962

tinches)

							tinches
				CURRENT DATA	<u> </u>	Y PAST I	RECORD
SNOW COURSE		DATE	SNOW DEPTH	WATER CONTENT	WATER	CONTENT	
NO.	NAME	ELEVATION	SURVEY	02.711	CONTENT	LAST YEAR	AVERAGE
Saskato	hewan River						
13A3	Iceberg Lake #3	5600	5/2	48	22.8	37.4	27.1
13A14	Josephine Lower #9	4900	5/1	40	15.2	17.7	17.1*
13A7	Mt. Allen #7	5700	5/1	101	40.4	59.2	47.3
13A6	Piegan Pass #6	5500	5/1	82	34.7	48.0	38.4
13A8	Ptarmigan #8	5800	5/2	70	30.7	47.6	37.8
Upper Y	Cellowstone River						
9D1	O O	rado o	r /a	0/	4.0		
10E3	Camp Senia	7890	5/1	26	8.3	4.6	- - (x
10E3	Canyon	7750	5/1	42	15.5	10.0	12.6*
9D3	Cooke City Gertrude Lake	7400	4/30	14	3.8	6.6	6.6*
9D5		9250	5/1 4/30	49	16.4	12.2	_
10D6	Grizzly Peak Independence	8400 8000	4/30	71 38	25.8	12.2 16.8	_
10E4	Lake Camp #1	7850	4/29	32	15.2 9.9	5.9	- 8.7*
9E1	Lodgepole	8200	4/29		7.2	6.8	11.0*
10E1	Lupine Creek	7300	5/1	24 18	6.2	6.8	8.6*
10D12	Monument Peak	9000	4/30	64	26.0	26.2	-
10D12	Sacajawea	6550	4/27	14	6.0	11.1	_
9D4	Timberline Creek	8850	5/1	51	17.1	12.4	_
154	11moc111mc of cer	8870	7/ 1)1	11.1	16.4	_
Wind Ri	ver						
9F12	Big Warm	8800	4/28	19	6.2	5.7	8.5*
9F4	Burroughs Creek	8800	4/29	35	12.7	10.1	16.5*
9F10	Dinwoodie	10000	4/30	49	12.7	9.9	12.1*
9F9	Dry Creek	9500	4/30	23	5.9	6.5	6.2*
9F6	Du Noir	8750	4/28	22	6.5	3.8	7.9
9F7	Geyser Creek	8500	4/27	12	3.9	3.7	6.6*
9F8	Little Warm	9500	4/27	66	20.8	14.3	17.1*
9F14	Sheridan R. S. #2	7500	4/28	3	0.8	1.0	4.8*
9F3	T-Cross Ranch	8000	4/29	T	0.2	1.0	4.5*
10F9M	Togwotee Pass	9600	4/30	75	33.0	28.8	29.5*



		AU OI IM.		~			(Inches)
				CURRENT DATA	<u> </u>	PAST	RECORD
	SNOW COURSE		DATE OF	SNOW DEPTH	WATER CONTENT	WATER	CONTENT
110.	NAME	ELEVATION	SURVEY			LAST YEAR	AVERAGE
Popo Ag	<u>ie River</u>						
8G2 9G3 9G4 8G1 8G3M 9F11 9G2	Blue Ridge Hobbs Park Mosquito Park Sawmill Glade South Pass St. Lawrence R. S. Trout Creek	9500 10000 9500 8500 9000 9000 8400	4/23 5/2 5/2 4/23 4/23 5/1 5/2	36 58 25 22 40 24 0	12.0 20.1 8.2 8.8 14.5 6.5	7.6 15.2 4.9 6.9 10.0 4.3 1.3	13.6 20.9* 8.4* 7.1 16.3 7.7* 3.2*
Big Hor	n River						
7E31 9F19 7E30 8F1 9F15	Five-Springs Falls Kîrwin Medicine Wheel Owl Creek Wood River #2	7500 11000 9000 8700 8000	4/30 5/3 4/25 4/23 5/2	8 46 39 25 12	2.0 13.7 13.3 8.4 4.2	7.8 - 18.4 8.3 4.1	6.7* - 17.6* 8.7* 4.2*
Shoshon	e River						
9E4M 10E6 10E5	Carter Mountain East Entrance Sylvan Pass	7800 7000 7100	5/1 4/30 4/30	16 0 8	4.9 0 2.5	4.7 0 8.6	7.1* 4.9* 10.7*
Nowood	Creek						
7E25 7E24M 7E27M 7E26 7E35	Cold Springs Camp Medicine Lodge Lakes Onion Gulch West Tensleep Lake Tyrell R. S.	8700 9500 8100 9075 8300	4/25 4/25 4/27 4/26 4/26	18 39 37 46 31	5.5 12.8 12.3 14.6 8.8	8.2 13.0 8.7 9.3 5.5	6.9* 12.1* 8.8* 11.0* 7.8*
Shell Creek							
7E21M 7E17 7E4 7E23	Bald Mountain Granite Pass Ranger Creek Shell Creek	9600 8950 8800 9600	4/24 4/27 4/24 4/24	65 65 25 59	24.5 19.6 8.8 18.6	25.2 17.2 7.6 15.0	24.1* 19.6* 7.5* 16.0*



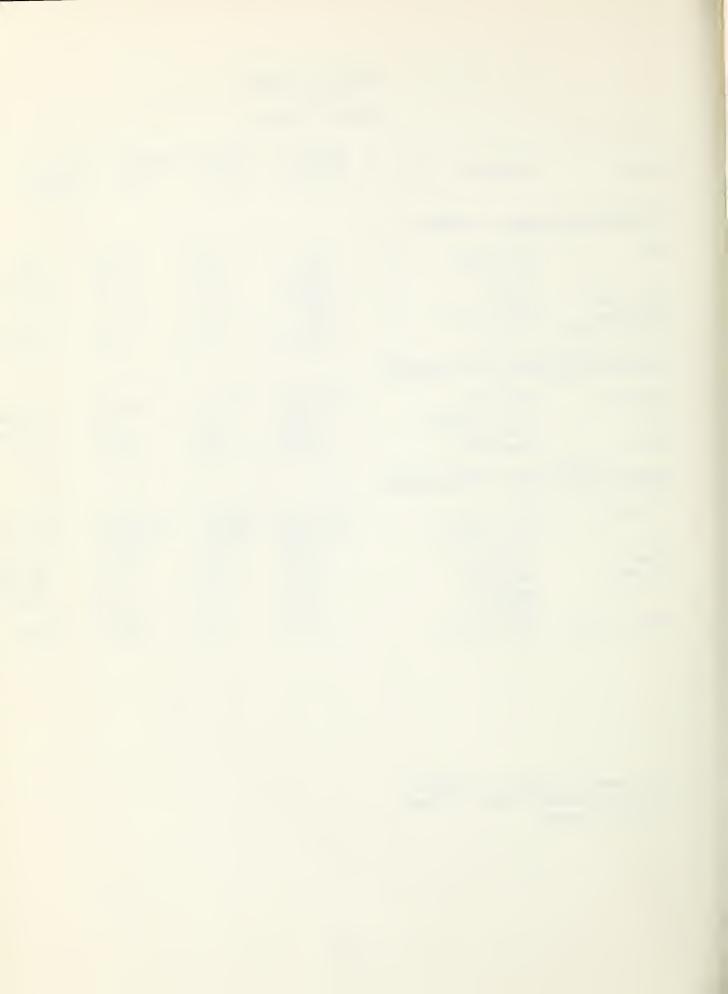
							tinches)
				CURRENT DATA		Y PAST	RECORD
SNOW COURSE		DATE OF	SMOW DEPTH	WATER	WATER CONTENT		
NO.	NAME	ELEVATION	SURVEY	DEFIN	CONTENT	LAST YEAR	AVERAGE
Tongue 1 7E20 7E32M 7E18A	Beaver-Tongue Big Goose #2 Bone Springs Divide	9200 7700 9200	4/24 4/29 4/27	59 24 69	21.3 6.5 20.9	22.0 7.7 18.8	21.4* 8.9* 19.9*
7E33 7E34A 7E14A 7E11 7E10 7E12A 7E13	Burgess R. S. #2 Dome Lake #2 Gloom Creek Sibley Lake Steam Boat Point Sucker Creek Wood Rock G. S.	7900 8800 9300 8000 7500 9000 8500	4/24 4/29 4/26 4/28 4/28 4/26 4/25	19 41 54 25 21 45 33	5.1 10.9 15.1 7.9 5.3 13.0 9.6	7.1 10.8 16.4 9.3 7.5 13.4 11.4	8.6* 9.8* 17.0* 10.8* 10.2* 14.8* 12.5*
Powder River							
7F1 7F2 6E2 7E8 7E5 7E6	Bear Trap Canyon Creek Muddy Creek G. S. Munkres Pass Soldier Park Sour Dough	8000 7400 7800 9700 8700 8500	4/28 4/30 5/1 5/1 5/2 5/1	26 31 0 36 16 20	9.2 10.2 0 10.7 5.4 6.2	8.6 15.5 4.2 8.0 6.3 6.9	- 3.9* 9.8* 6.1* 6.6*



RESERVOIR STORAGE as of April 30, 1962

BASIN	RESERVOIR	USEABLE CAPACITY	USEABLE 1962	•	00 A. F. 1943–57 Average
MISSOURI RIVER	BASIN - WYOMING				
Wind Owl Creek Shoshone Belle Fourche	Bull Lake Pilot Butte Boysen Anchor Buffalo Bill Key Hole	152.0 31.6 560.0AC 16.5 440.0 190.0AC	84.1 28.4 134.5 0 164.5	56.5 27.4 92.7 - 117.5 2.7	53.5 23.0 183.0** - 230.3 10.8**
MISSOURI RIVER	BASIN - NORTH DAKOTA				
Missouri Heart James	Garrison E. A. Patterson Lake Tschida Jamestown	18,000.0AC 5.6AC 68.7AC 20.0AC	3,901.1 3.1 40.9 13.0	4,247.8 4.1 49.7 16.1	5.4** 66.6**
MISSOURI RIVER	BASIN - SOUTH DAKOTA				
Missouri	Oahe Fort Randall Gavins Point	17,000.0AC 3,800.0AC 320.0AC	6,481.4T 2,727.4 239.7	2,495.0T 2,802.9 230.6	2,371.6**
Grand Cheyenne	Shadehill Angostura Deerfield Pactola	84.0AC 90.0AC 15.1AC 55.0AC	35.8 18.7 4.7 4.3	50.2 7.2 3.1 15.6	85.3** 52.1** 12.4**
Belle Fourche	Belle Fourche	185.2AC	73.0	42.3	132.9

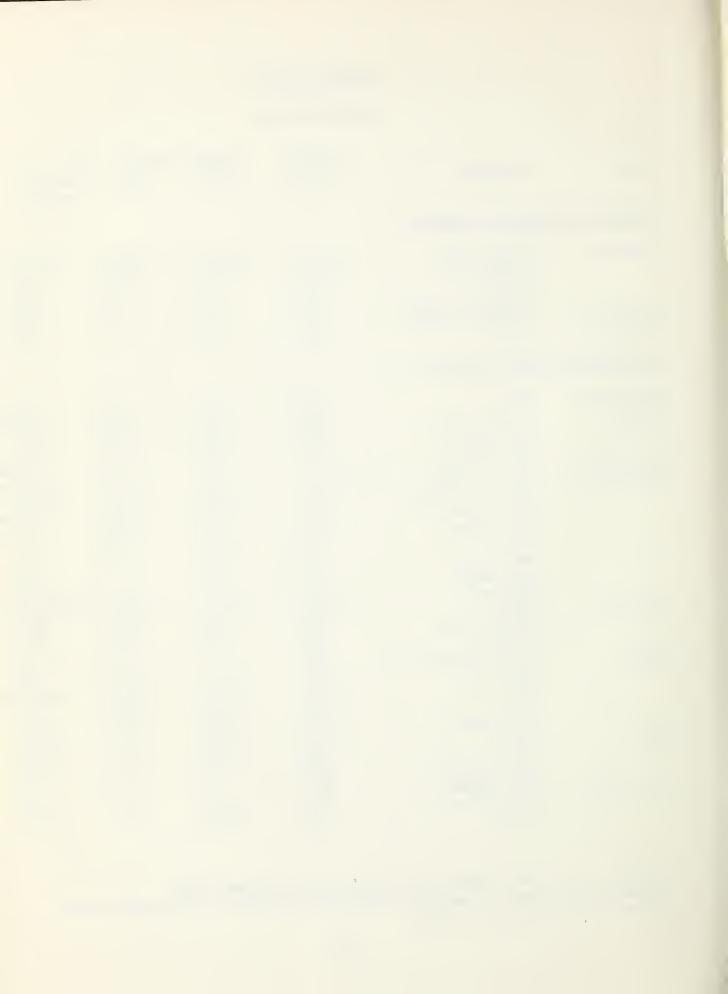
^{**} Average for period of record.
AC Active Capacity, USBR, Billings.
T Total storage.



RESERVOIR STORAGE as of April 30, 1962

BASIN	RESERVOIR	USEABLE CAPACITY	USEABLE 1962	STORAGE - 10 1961	000 A. F. 1943-57 Average		
COLUMBIA RIVER BASIN - MONTANA							
Flathead Clark Fork Bitterroot	Hungry Horse Flathead Lake Camas 1/ Mission Valley 2/ Georgetown Lake Como	3,428.0 1,791.0 45.2 100.3 31.0 34.8	2,321.0 1,119.0 34.2 41.2 20.9 24.0	2,213.0 1.276.0 31.6 37.1 24.0	2,048.0** 936.0 30.6 46.8 21.2 16.5		
MISSOURI RIVER	BASIN - MONTANA						
Beaverhead Ruby Madison Gallatin Missouri Sun-Teton	Lima Ruby Hebgen Lake Ennis Lake Middle Creek Canyon Ferry Hauser & Helena Lake Helena Holter Lake Ackley Lake Durand Martinsdale Fort Peck Gibson Willow Creek Pishkun	84.0 38.8 345.0 41.0 8.0 2,043.0 61.9 10.4 81.9 5.8 7.0 23.1 19,410.0 105.0 32.3 32.0	50.6 N.R. 154.3 38.7 4.4 1,419.0 56.2 8.4 74.4 N.R. 3.4 7.6 8,129.0 74.4 14.3 25.6	25.9 31.6 182.4 35.7 4.3 1,432.0 60.7 10.0 74.9 4.1 4.7 4.4 11,000.0 34.1 25.6 26.4	55.9 27.0** 212.1 34.4 4.7** 1,628.0** 46.9 6.1** 57.1 4.3 6.2 11.4 12,003.0 70.6 21.1 20.7		
Marias	Lower Two Medicine Four Horns Tiber Swift Lake Francis	16.6 19.2 1,316.0 30.0 112.0	0 13.7 648.1 24.5 82.5	4.5 14.4 662.6 18.7 80.0	1.9 9.0 656.9** 27.3 99.9		
Milk	Fresno Nelson	127.2 66.8	69.4 19.4	- 37.4	103.0 37.1		
Yellowstone	Lake Sherburne Mystic Lake Tongue River Cooney	66.1 20.8 68.0 27.5	8.5 1.4 N.R. 20.0	1.5 4.8 22.8	24.8 3.3 17.4 14.7		

^{1/} Sum of four small reservoirs on west side of Flathead Lake.
2/ Sum of eight small reservoirs in Mission Valley not including Jocko Lake.
** Average for period of record.



Agencies Cooperating in Collecting Data Contained in this Bulletin

- U. S. Forest Service Region I, Missoula, Montana
- U. S. Geological Survey Helena, Montana
- U. S. Army Corps of Engineers Portland, Oregon Seattle, Washington Omaha, Nebraska Riverdale, N. D.
- U. S. Indian Irrigation Service St. Ignatius, Montana
- U. S. Weather Bureau Helena, Montana
- U. S. Fish & Wildlife Service Red Rock Lakes Refuge Monida, Montana
- U. S. Bureau of Reclamation Billings, Montana Boise, Idaho
- Montana Power Company Butte, Montana
- Agricultural Experiment Station North Montana Branch Station Havre, Montana
- Montana State Highway Dept. East Glacier, Montana

- National Park Service Yellowstone National Park Glacier National Park
- Montana Experiment Station Montana State College Bozeman, Montana
- Bonneville Power Administration Portland, Oregon
- Montana State School of Forestry Montana State University Missoula, Montana
- Soil Conservation Service Montana, Wyoming, Idaho
- Soil Conservation Districts Montana Counties
- Johnson Flying Service, Inc. Missoula, Montana
- Water Rights Branch
 Dept. of Lands & Forests
 Victoria, British Columbia
- Department of Northern Affairs & National Resources Calgary, Alberta

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SOIL CONSERVATION SERVICE
P.O. BOX 855
BOZEMAN, MONTANA

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FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry

"The Conservation of Water begins with the Snow Survey"